

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
APPLICATION FOR UNITED STATES PATENT

In re Patent Application of	)	Group Art Unit: 2876
Louis N. Koppel et al.	)	
Appln. No. 09/527,389	)	<b>POWER OF ATTORNEY BY ASSIGNEE AND CERTIFICATE</b>
Filed: March 16, 2000	)	<b>BY ASSIGNEE UNDER 37 CFR § 3.73(b)</b>
For: CALIBRATION AND ALIGNMENT OF X-RAY	)	
REFLECTOMETRIC SYSTEMS	)	

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Therma-Wave, Inc., assignee of the entire right title and interest in the above-identified application by assignment dated March 20, 2000 and March 29, 2000, which assignment is recorded in the Patent and Trademark Office at Reel 010918, frame 0317, hereby appoints the members of the firm of LIMBACH & LIMBACH L.L.P., a firm composed of:

Karl A. Limbach	18,689	Alfred A. Equitz	30,922	Michael R. Ward	38,651
George C. Limbach	19,305	Charles P. Sammut	28,901	Charles L. Hamilton	42,624
John K. Uilkema	20,282	Mark C. Pickering	36,239	Andrew V. Smith	43,132
Neil A. Smith	25,441	Patricia Coleman James	37,155	Eric N. Hoover	37,355
Veronica C. Devitt	29,375	Kathleen A. Frost	37,326	Frank J. Mycroft	P-46,946
Ronald L. Yin	27,607	Alan A. Limbach	39,749	Parisa Jorjani	P-46,813
Gerald T. Sekimura	30,103	Douglas C. Limbach	35,249	Robert M. McConnell	46,912
Michael A. Stallman	29,444	Seong-Kun Oh*		J. Thomas McCarthy	22,420
Philip A. Girard	28,848	Cameron A. King	41,897	Joel G. Ackerman	24,307
Michael J. Pollock	29,098	Kyla L. Harriel	41,816	Roger S. Sampson	44,314
Stephen M. Everett	30,050	Mayumi Maeda	40,075	Susan M. Schmitt	34,427
				Edward B. Weller	37,468

\* Recognition under 37 CFR 10.9(b)

as its attorneys with full power of substitution to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

The assignee certifies that it has reviewed the assignment and to the best of the assignee's knowledge and belief, title is in the assignee.

Please direct all correspondence regarding this application to the following:

LIMBACH & LIMBACH L.L.P.  
Attn: Eric N. Hoover  
2001 Ferry Building  
San Francisco, CA 94111

Telephone: (415) 433-4150  
Facsimile: (415) 433-8716

Dated: 9-20-00

Therma-Wave, Inc.

By: Martin Schwartz  
Name: Martin Schwartz  
Title: Chief Executive Officer

9-20-00

**DECLARATION FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**CALIBRATION AND ALIGNMENT OF X-RAY REFLECTOMETRIC SYSTEMS**

the specification of which (check one) ☐ is attached hereto or ☒ was filed on March 16, 2000 as Application No. 09/527,389 and was amended on        (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

Yes No

Number Country Day/Month/Year Filed

Number Country Day/Month/Year Filed

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) below.

Application Number Filing Date

Application Number Filing Date

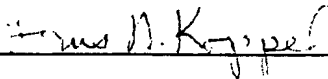
I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Number Filing Date Status: Patented, Pending, Abandoned

Application Number Filing Date Status: Patented, Pending, Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Louis N. Koppel

Inventor's signature  20 March 2000  
Date

Residence 308 Waverley Street, #4, Menlo Park, CA 94025

Citizenship U.S.A.

Post Office Address 308 Waverley Street, #4, Menlo Park, CA 94025

Full name of second joint inventor, if any, Craig E. Uhrich

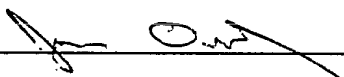
Inventor's signature  3/29/2000  
Date

Residence 202 Rutherford Avenue, Redwood City, CA 94061

Citizenship U.S.A.

Post Office Address 202 Rutherford Avenue, Redwood City, CA 94061

Full name of third joint inventor, if any, Jon Opsal

Inventor's signature  March 20, 2000  
Date

Residence 2295 Norwood Road, Livermore, CA 94550

Citizenship U.S.A.

Post Office Address 2295 Norwood Road, Livermore, CA 94550



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 26, 2000

PTAS

LIMBACH & LIMBACH L.L.P.  
ERIC N. HOOVER / *mas*  
2001 FERRY BUILDING  
SAN FRANCISCO, CA 94111

**CORRECTED  
NOTICE**



\*101459766A\*

**RECEIVED**

**OCT 02 2000**

LIMBACH & LIMBACH L.L.P.

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/21/2000

REEL/FRAME: 010918/0317  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KOPPEL, LOUIS N.

DOC DATE: 03/20/2000

ASSIGNOR:

UHRICH, CRAIG E.

DOC DATE: 03/29/2000

ASSIGNOR:

OPSAL, JON

DOC DATE: 03/20/2000

ASSIGNEE:

THERMA-WAVE, INC.  
1250 RELIANCE WAY  
FREMONT, CALIFORNIA 94539

SERIAL NUMBER: 09527389  
PATENT NUMBER:

FILING DATE: 03/16/2000  
ISSUE DATE:

010918/0317 PAGE 2

DIANE RUSSELE, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

07-20-2000



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Commissioner of Patents and Trademark

101408273

documents or copy thereof.

1. Name of conveying party(ies):

Louis N. Koppel  
Craig E. Uhrich  
Jon Opsal

700 JUN 21 PM 12:45  
OPR/FINANCE

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: 3/20/2000; 3/29/2000; 03/20/2000

2. Name and address of receiving party(ies):

Name: Therma-Wave, Inc.

Internal Address: \_\_\_\_\_

Street Address: 1250 Reliance Way

City, State and Zip: Fremont, CA 94539

Additional Name(s) & address(es) attached?

☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)  
09/527,389

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Eric N. Hoover

Internal Address: Limbach & Limbach L.L.P.  
Street Address: 2001 Ferry Building  
City, State, ZIP: San Francisco, California 94111  
Telephone: (415) 433-4150  
Facsimile: (415) 433-8716

Attorney Docket No. TWI-11700

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):.....\$ 40.00

- ☒ Enclosed  
☒ Charge any deficiencies in the enclosed fee to  
Deposit Account No. 12-1420  
☐ Authorized to be charged to deposit account

8. Deposit account number: 12-1420

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Eric N. Hoover, Reg. No. 37,355  
Name of Person Signing

Eric Hoover  
Signature

6/12/00  
Date

Total number of pages including cover sheet, attachments and document: 3

07/20/2000 NTHA11 00000012 09527389

01 FC:581

40.00 GP

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20213, and to the Office of Management and Budget, Paperwork Reduction Project, (0651-0011), Washington, D.C. 20503

ASSIGNMENT

WHEREAS, WE, Louis N. Koppel, Craig E. Uhrich, Jon Opsal, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: CALIBRATION AND ALIGNMENT OF X-RAY REFLECTOMETRIC SYSTEMS

Application (Declaration/Oath) Execution Date: March 20, 29, 20, 2000

Filing Date: March 16, 2000 Application No.: 09/527,389

WHEREAS, Therma-Wave, Inc., a corporation of the State of Delaware, 1250 Reliance Way, Fremont, CA 94539 hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in the said invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, prolongations or extensions thereof, said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignors had this assignment and transfer not been made, to the full end and term of any such Letters Patent.

Assignors further agree that they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date: 20 March 2000

Louis N. Koppel  
Louis N. Koppel

State of

California

County of

Alameda

On

3-20-00

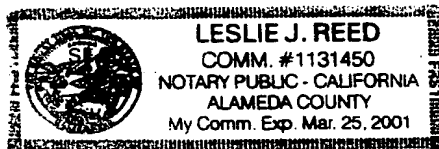
before me,

LESLIE J. REED

personally appeared LOUIS N. KOPPEL personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Leslie J. Reed  
Signature of Notary



IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date: MARCH 29, 2000

Craig Uhrich  
Craig E. Uhrich

State of California  
County of Alameda

On 3-29-00 before me, LESLIE J. REED

personally appeared CRAIG E. UHRICH personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Leslie J. Reed  
Signature of Notary

SEAL

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date: March 20, 2000

Jon Opsal  
Jon Opsal

State of California  
County of Alameda

On 3-21-00 before me, LESLIE J. REED

personally appeared JON OPSAL personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Leslie J. Reed  
Signature of Notary

